



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,615	11/07/2001	Jeffrey S. Kopal	BOC9-2001-0039 (284)	4195

40987 7590 09/07/2004

AKERMAN SENTERFITT
P. O. BOX 3188
WEST PALM BEACH, FL 33402-3188

EXAMINER

ALBERTALLI, BRIAN LOUIS

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,615	KOBAL ET AL.	
	Examiner	Art Unit	
	Brian L Albertalli	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-10, 12-13, 15-18, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker et al. (U.S. Patent 6,092,044).

3. In regard to claims 1 and 15, Baker et al. discloses a method of generating pronunciation information and machine-readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

Graphically presenting at least one activatable visual identifier corresponding to individual ones of a plurality of phonemes (Fig. 17, control window 1750 includes a phoneme table button 68 that opens a table containing valid phonemes, column 18, lines 49-51); and

Responsive to a selection of one of said visual identifiers, generating said pronunciation information in accordance with said selected visual identifier (pronunciation box 1756 is edited using the phoneme table, column 18, lines 51-52).

Compiling said pronunciation information responsive to a selection of one of said plurality of visual identifiers. Baker et al. discloses that activating a text-to-speech button will play back the phonemes in the pronunciation box (column 18, lines 53-45).

The user does not have to perform a separate compile operation prior to playing the text. Therefore, responsive to the selection of one of the visual identifiers (one of the entries in the phoneme table) the pronunciation information (phonemes in pronunciation box 1756) is compiled for use with a speech driven application (a text-to-speech converter uses phoneme information from pronunciation box 1756).

4. In regard to claims 2-4 and 16-18, Baker et al. discloses that the phoneme table is used to edit the pronunciation information (phonemes contained in pronunciation box 1756, column 18, lines 51-52). Editing encompasses the inserting, removing, and reordering of information. The phoneme associated with the selected visual identifier would necessarily be the phoneme the user intended to insert or remove from the phoneme information. Therefore, Baker et al. discloses the step of identifying at least one phoneme associated with said selected visual identifier and inserting said identified at least one phoneme into said pronunciation information, the step of identifying at least one phoneme associated with said selected visual identifier and removing said identified at least one phoneme into said pronunciation information, as well as the step of reordering a plurality of phonemes of said pronunciation information.

5. In regard to claim 9 and 23, Baker et al. discloses storing the pronunciation information in memory (add button 1758 adds words to the vocabulary, column 18, lines 7-10).

6. In regard to claim 10, Baker et al. discloses a pronunciation composition tool comprising:

A library comprising a plurality of phonemes (dictionary, column 18, lines 7-10);

A graphical user interface comprising a plurality of activatable visual identifiers corresponding to particular ones of said plurality of phonemes (phoneme table, column 18, lines 49-51); and

A processor configured to generate pronunciation information by including selected ones of said plurality of phonemes from said library responsive to a selection of at least one of said activatable visual identifiers (phoneme table contains valid phonemes, column 18, lines 49-51, used to edit pronunciation box 1756, column 18, lines 51-52, phonemes in pronunciation box generated by a processor column 19, lines 5-10).

7. In regard to claim 12, Baker et al. discloses a compiler (processor, column 19, line 7) that compiles the pronunciation information for use with a speech driven application. Baker et al. discloses that activating a text-to-speech button will play back the phonemes in the pronunciation box (column 18, lines 53-45). The information in the phoneme box is in a format that is usable by the text-to-speech converter and therefore, compiled.

8. In regard to claim 13, the processor is further configured to modify the pronunciation information (the user can edit pronunciations in pronunciation box 1756, column 18, lines 5-6).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5-6, 8, 14, 19-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al., in view of Shaw et al. (U.S. Patent 6,363,342).

11. In regard to claims 5 and 19, Baker et al. does not disclose the pronunciation information comprises at least one parameter, and the generating step comprises:

Changing said at least one parameter of said pronunciation information.

Shaw et al. discloses a method of generating pronunciation information that comprises a graphically presented means for changing at least one parameter of pronunciation information (Fig. 2, stress buttons 50 alter the stress applied to the syllable, column 4, lines 32-36).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Baker et al. to include a parameter in the pronunciation information and to change the parameter of pronunciation information, as disclosed by Shaw et al., so the word represented by the pronunciation information would be pronounced

correctly in a text-to-speech converter, thereby increasing the intelligibility of the audibly output word. Additionally, if the pronunciation information were to be used to generate models for a speech recognition device, changing the parameter of the pronunciation information would conform the recognition models more closely to input speech, thereby increasing recognition results.

12. In regard to claim 6 and 20, the combination of Baker et al. and Shaw et al., as applied to claim 5, above, discloses in Shaw et al. that the parameter consists of a stress parameter (column 4, lines 32-36).

13. In regard to claim 8, 14, and 22, Baker et al. does not disclose the plurality of phonemes includes phonemes from at least two languages.

Shaw et al. discloses a plurality of phonemes includes phonemes from at least two languages (phonetic dictionaries contain phonemes corresponding to a plurality of languages, column 4, lines 11-25).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Baker et al. to include phonemes from at least two languages in order to facilitate the development of word pronunciations in the users native language, as taught by Shaw et al. (column 4, lines 23-25).

14. Claims 7, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al., in view of Holm et al. (U.S. Patent 5,850,629).

In regard to claims 7 and 21, Baker et al. discloses playing an audio approximation of said pronunciation information (text-to-speech button plays back phonemes in pronunciation box 1756).

Baker et al. does not disclose playing an audio approximation of said pronunciation information responsive to a selection of one of said plurality of visual identifiers.

Holm et al. discloses a method of generating pronunciation information that comprises a graphically presented means for cycling through available phonemes and playing an audio approximation of those phonemes (column 7, line 66 through column 8, line 8).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Baker et al. to play an audio approximation of the pronunciation information in response to a selection of a visual identifier of that pronunciation information so that a user who was not familiar with phonetic representations could hear the sound produced by the selected phoneme, as taught by Holm et al. (column 7, line 66 through column 8, line 6).

15. In regard to claim 11, Baker et al. discloses a text-to-speech system configured to play an audio approximation of said pronunciation information (column 18, lines 43-45).

Baker et al. does not disclose the text-to-speech system is configured to play an audio approximation of said pronunciation information responsive to activation of one of said activatable visual identifiers.

Holm et al. discloses a text-to-speech system (Fig. 1, 36) configured to cycle through available phonemes and playing an audio approximation of those phonemes (column 7, line 66 through column 8, line 8).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the text-to-speech system of Baker et al. to play an audio approximation of the pronunciation information in response to a selection of a visual identifier of that pronunciation information so that a user who was not familiar with phonetic representations could hear the sound produced by the selected phoneme, as taught by Holm et al. (column 7, line 66 through column 8, line 6).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gasper et al. (U.S. Patent 5,278,943) discloses a speech generation system that includes graphic representations of phonemes. Dick (U.S. Patent 4,831,654) discloses a text editor for developing phoneme models that requires the vocabulary to be compiled before use. Luther (U.S. Patent 5,500,919) discloses a graphics user interface for controlling text to speech conversion. Tannenblatt (U.S. Patent 6,006,187) discloses a graphical means for modifying the prosody of text. Contolini et al. (U.S. Patent 6,233,553) discloses a graphic interface for modifying the

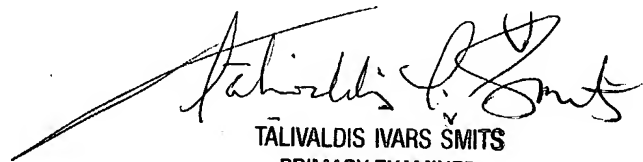
pronunciation of words that utilizes a drop down menu for the user to select a valid phoneme.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L Albertalli whose telephone number is (703) 305-1817. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (703) 305-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 9/1/04



TĀLIVALDIS IVARS SMITS
PRIMARY EXAMINER